A Cautionary Tale of the impacts of industrial development.

I am a Belfast resident, retired in 2006 as president of an engineering consulting company. The company, Applied Science Associates<sup>1</sup> (ASA), is an offshoot of the Ocean Engineering department of the University of Rhode Island. Our initial large project, in the 70's, was for the Bureau of Land Management (BLM), assessing the likely fishery impacts of oil drilling on Georges Bank. In my 26 year career with ASA, I worked with US federal government agencies (NOAA, USCG, US Army Corps of Engineers), foreign governments and corporations, and several international oil companies. I managed two large consortium oil spill model developments with U.S. and Canadian government agency and international oil company funding. We developed hydrodynamic, pollutant transport, and biological model systems, used by the U.S. Government to assess damages for oil spills. These model systems are also in use by international oil companies for responding to and assessing likely impacts of existing and planned offshore oil and gas drilling. I worked in thirty countries. Our company was, and remains, a leader in this modeling technology.

One of my former colleagues from ASA recently completed, for NOAA, the damage assessment for the BP Horizon oil spill in the Gulf of Mexico (April, 2010). I worked with her in Washington, DC in the early development of this assessment methodology.

In the early 2000's, in a reporting session for a jointly funded oil spill blowout model that I managed (funded by Exxon-Mobil, BP, USACOE, and Canadian Dept. of the Environment), a BP drilling engineer asked me to talk off-line. He was in charge of drilling in deep water in the Gulf of Mexico. He told me that within the past months he had a near accident with a deep drilled well. They lost their drill string and he did not know for a few days whether the blowout preventers (the last resort in an ocean well blowout) had worked. He predicted that there would be a large spill in the future, a spill that would be very hard to stop. His prediction came true in the Horizon spill, perhaps the biggest oil spill in history.

This experience was not an isolated one. I came to see over my career that in spite of our efforts to make rational and ecologically based regulatory systems, there was an inevitable and underlying pressure in the industry to produce, to make money. The environmental and regulatory work is always overshadowed by the need for each production cell to meet and exceed quota.

The more complex the systems that generate profit, the more difficult is the containment of pollutants into our natural systems. The NAF development is on the extreme end of the complexity and scale of industrial fish rearing. If allowed to be built and brought into production, the likelihood of failures—in containment, in the water circulation systems, in the sources of supply—are high. In the development of complex artificial growing systems, as in the extraction of our petroleum resources, our technology is much better at developing complicated production systems than objectively regulating their safe operation. The safety of our natural systems is characteristically subsumed by short term monetary gain.

We must be aware of the eventual cost to our community of decommissioning and cleaning up the immense infrastructure planned to support NAF's vision. Once NAF's production stops and the foreign investment leaves, there will be costs equivalent to their hundreds of millions of dollars of building the system; costs we have no hope of generating from our municipal budgets.

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<sup>1</sup> As of 2011, ASA is part of RPS Group. http://asascience.com/